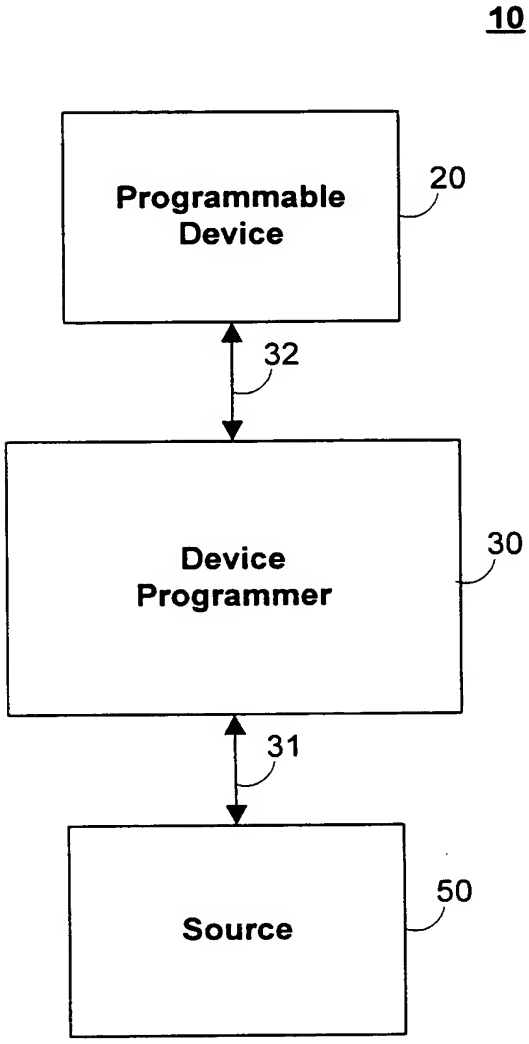
10
Programmable Device
20
32
Device Programmer
30
31
Source
50

FIG. 1

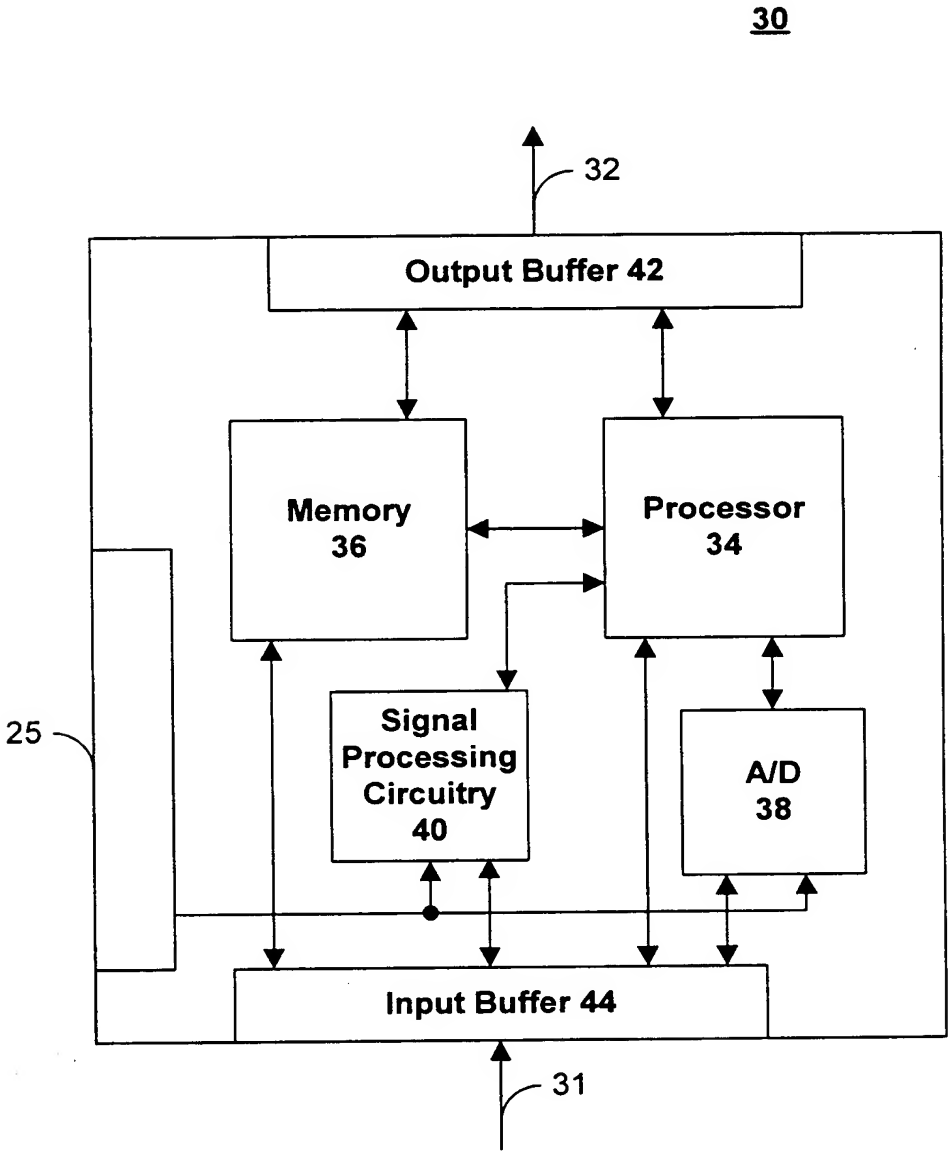
30
32
Output Buffer 42
Memory 36
Processor 34
25
Signal Processing Circuitry 40
A/D 38
Input Buffer 44
31

FIG. 2

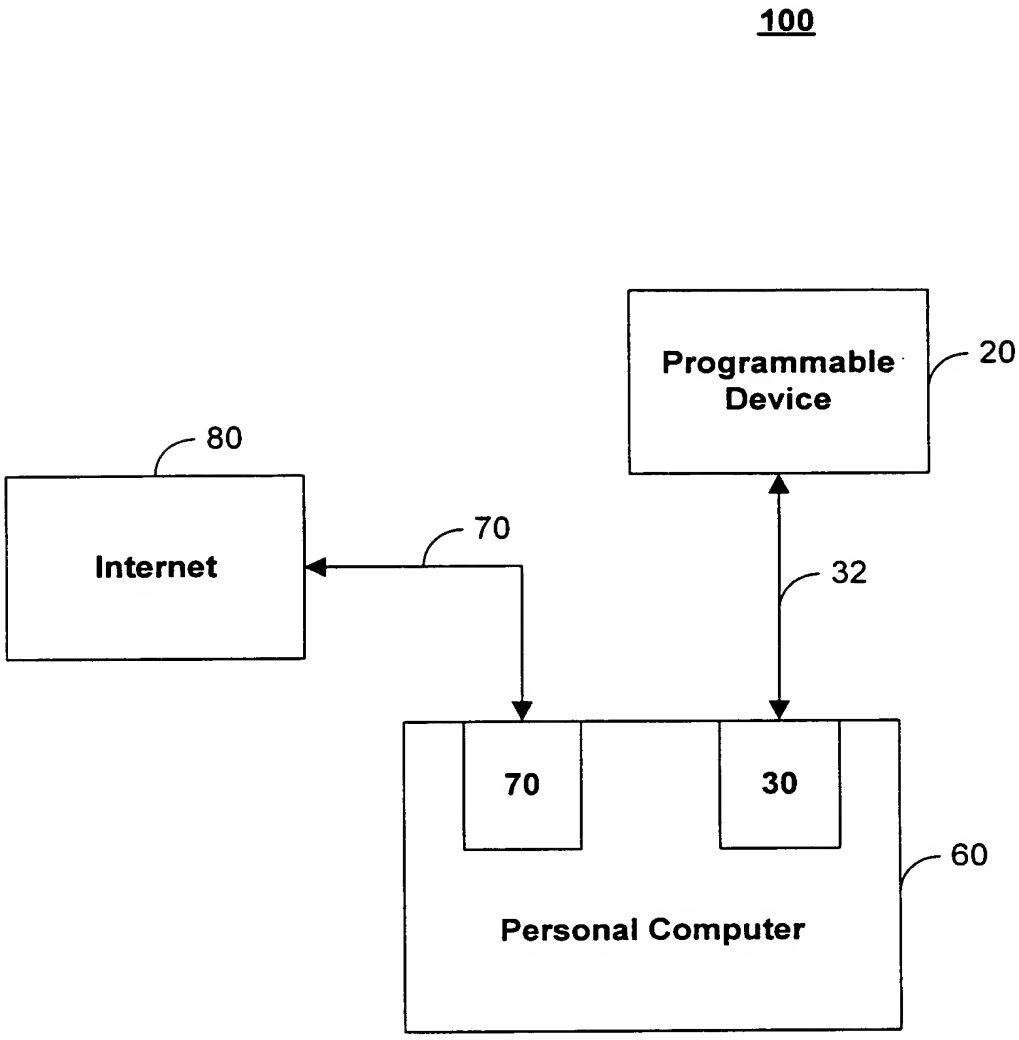
100
Programmable Device
20
80
Internet
70
32
70
30
60
Personal Computer

FIG. 3

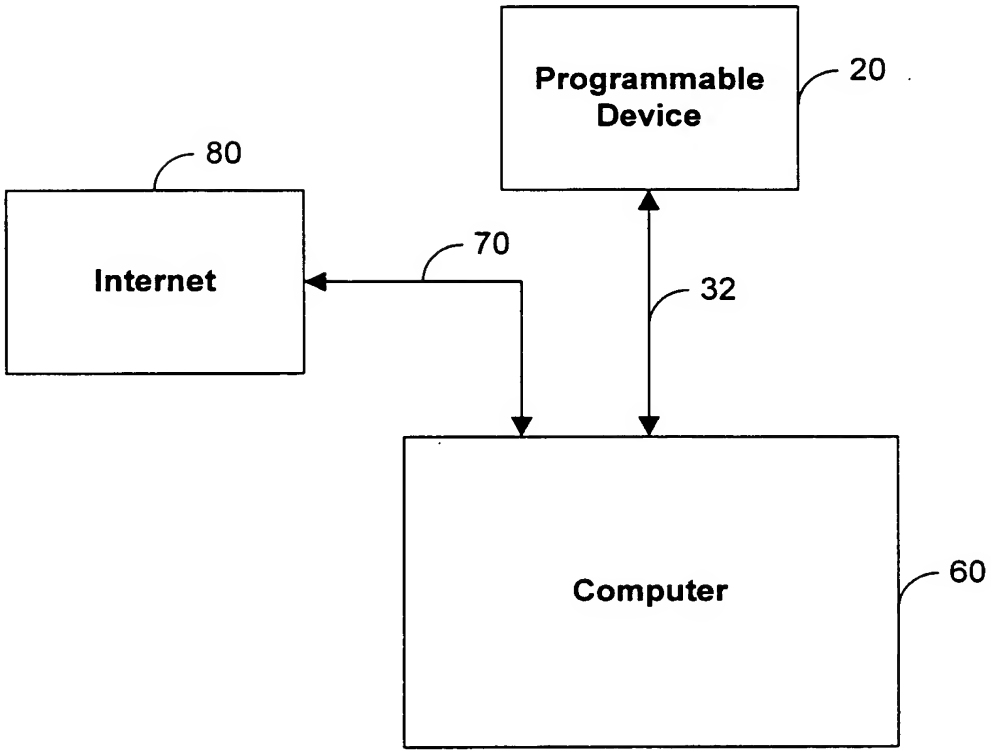

FIG. 4A

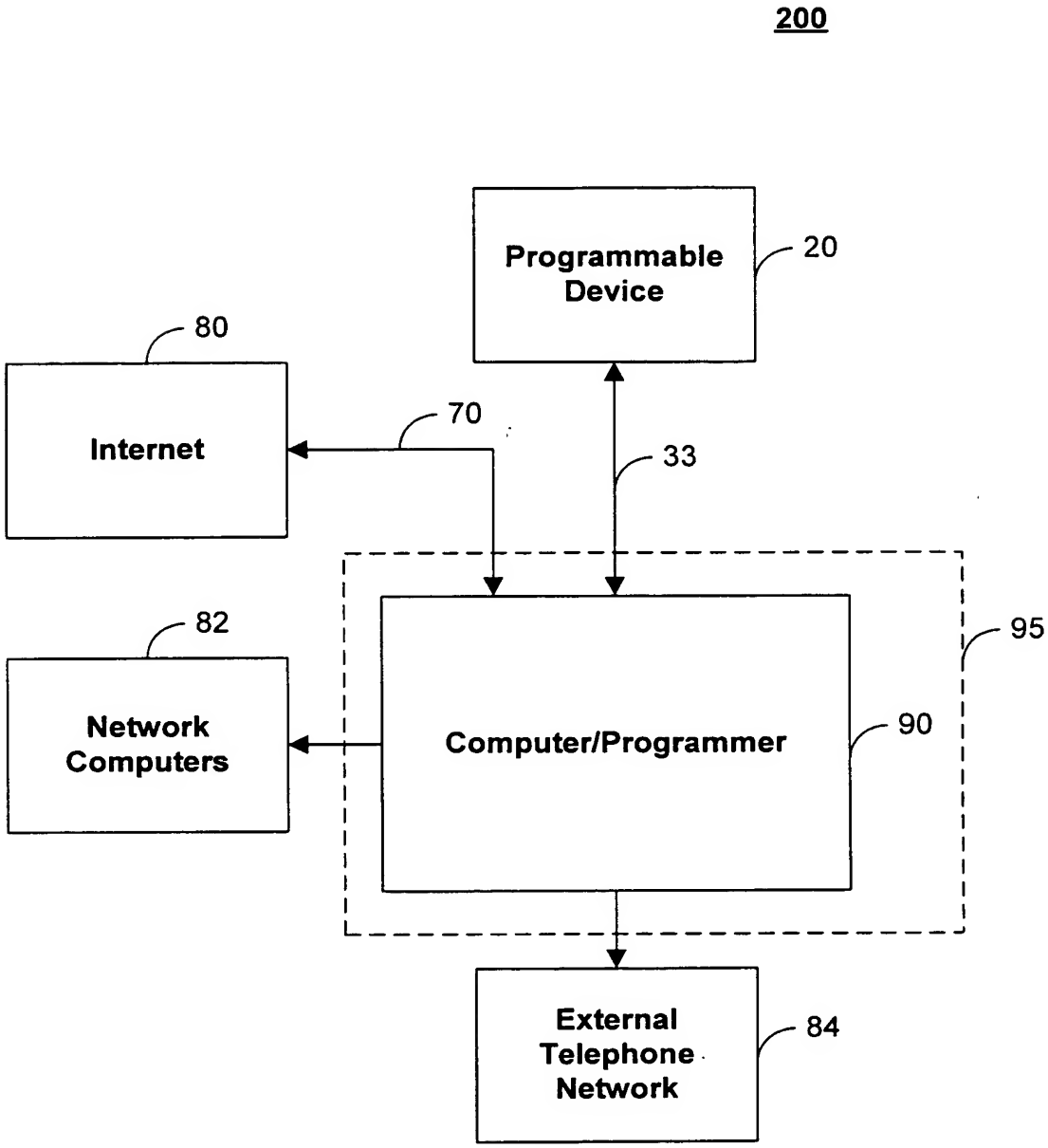
200
Programmable Device
20
80
Internet
70
33
82
Network Computers
Computer/Programmer
90
95
External Telephone Network
84

FIG. 4B

300

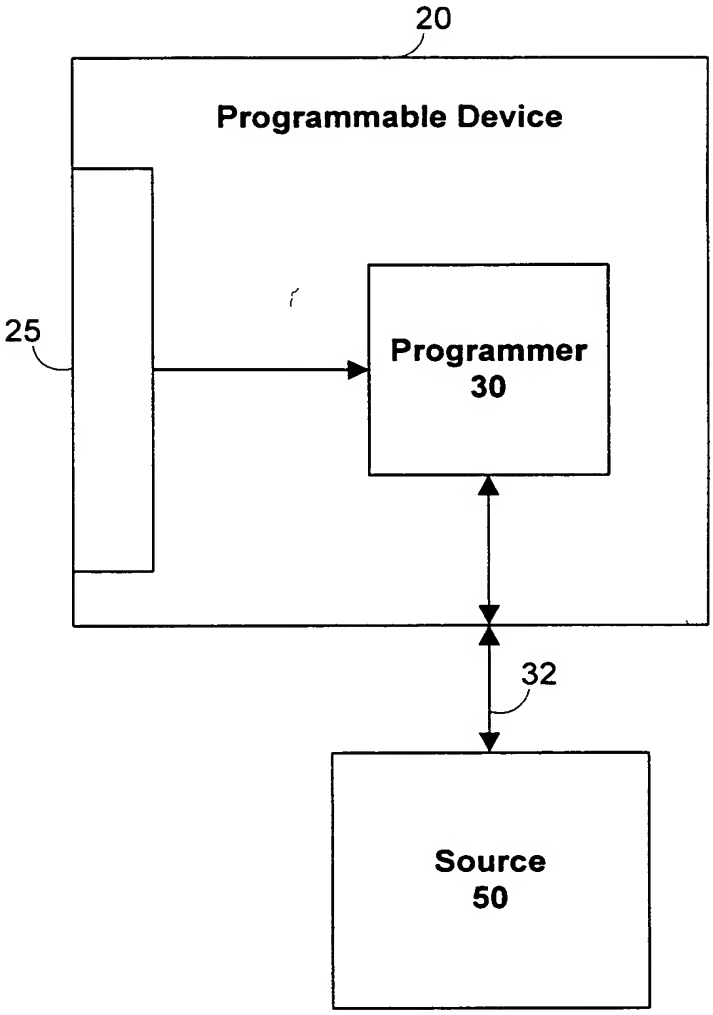

FIG. 5

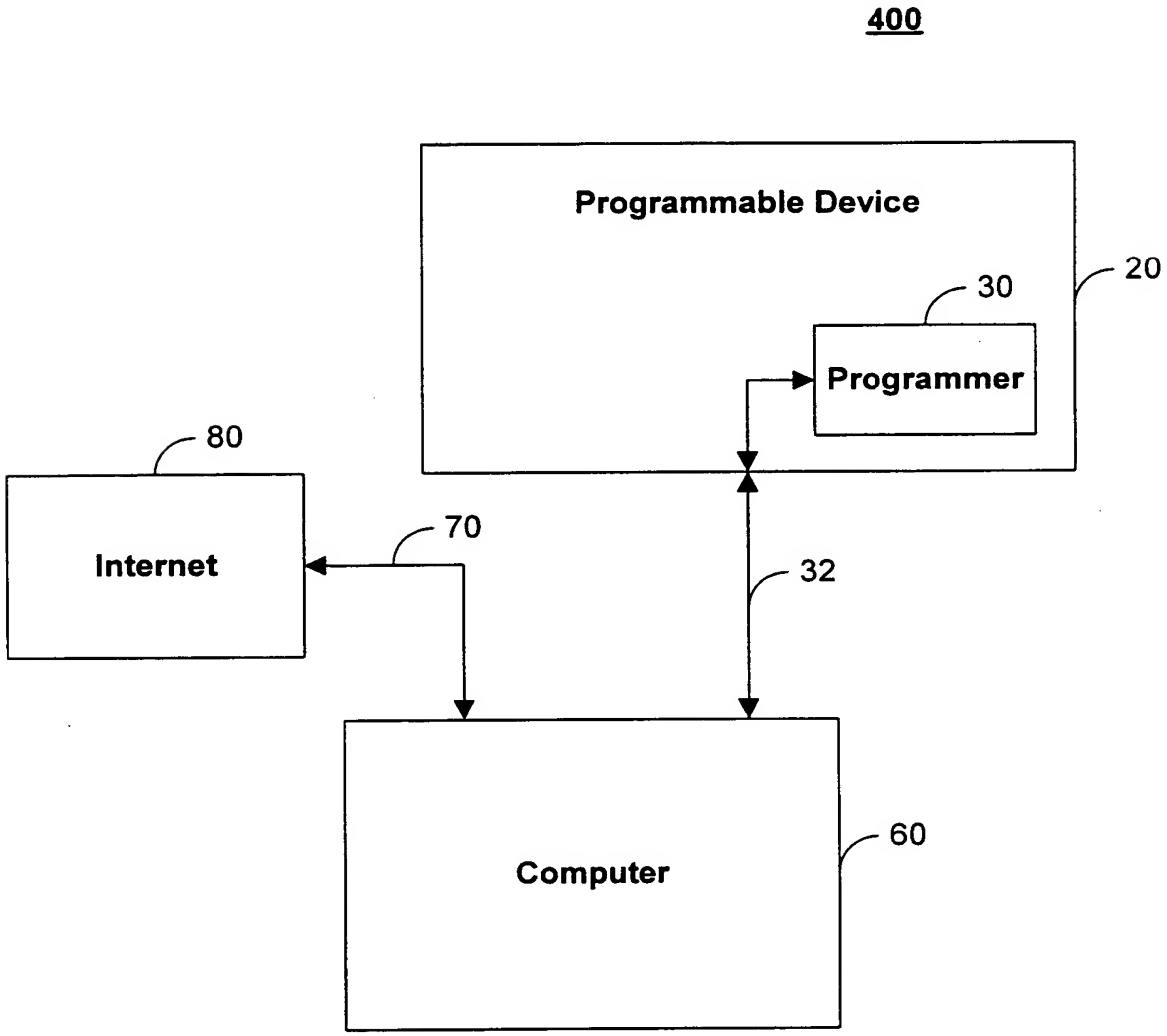
400
Programmable Device
20
30
Programmer
80
Internet
70
32
Computer
60

FIG. 6

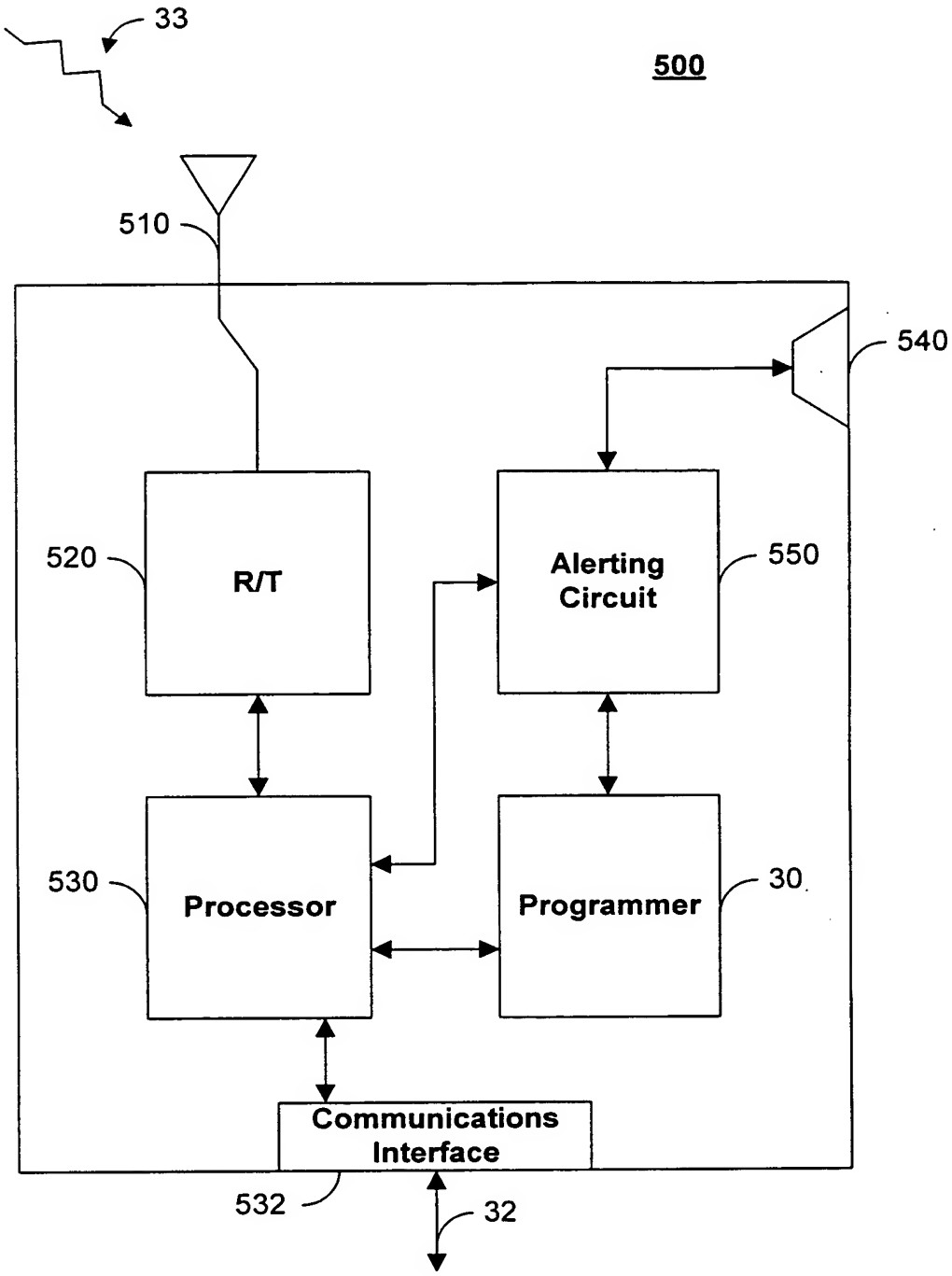
33
500
510
540
520
R/T
Alerting Circuit
550
530
Processor
Programmer
30
Communications Interface
532
32

FIG. 7

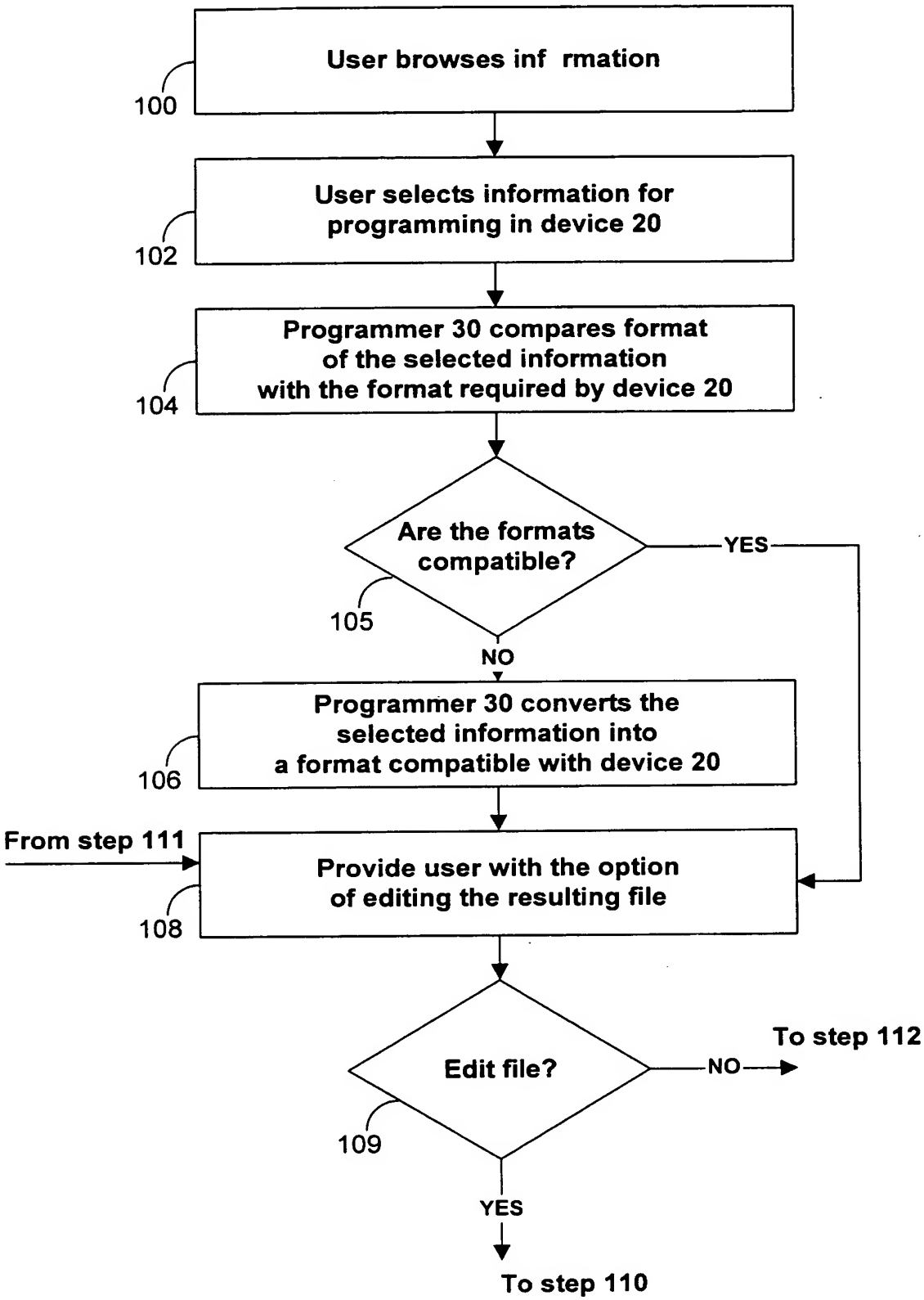
User browses inf rmation
100
User selects information for programming in device 20
102
Programmer 30 compares format of the selected information with the format required by device 20
104
Are the formats compatible?
105
YES
NO
Programmer 30 converts the selected information into a format compatible with device 20
106
From step 111
Provide user with the option of editing the resulting file
108
Edit file?
109
NO
To step 112
YES
To step 110

FIG. 8

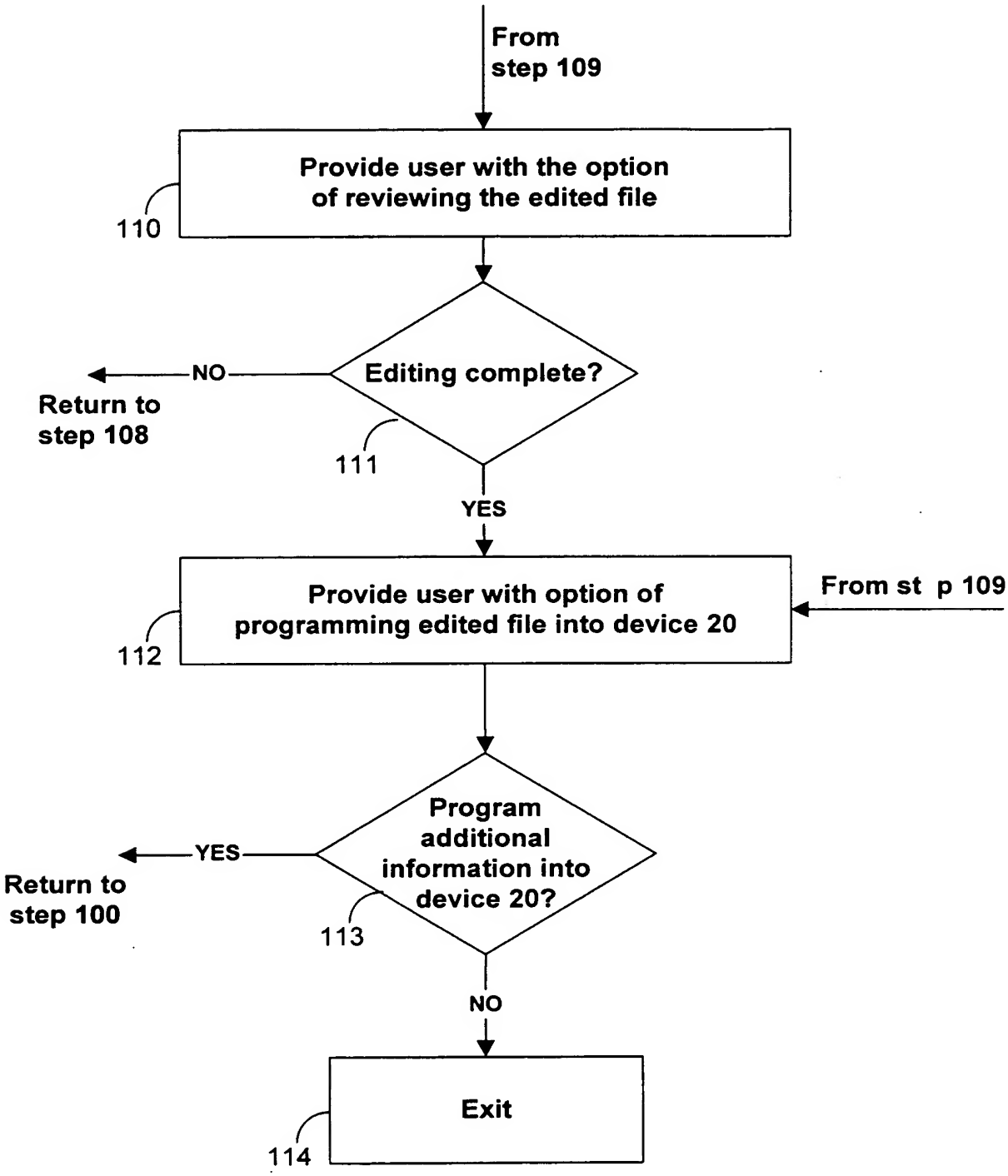
From step 109
Provide user with the option of reviewing the edited file
110
Editing complete?
NO
Return to step 108
111
YES
Provide user with option of programming edited file into device 20
From st p 109
112
Program additional information into device 20?
YES
Return to step 100
113
NO
Exit
114

FIG. 9

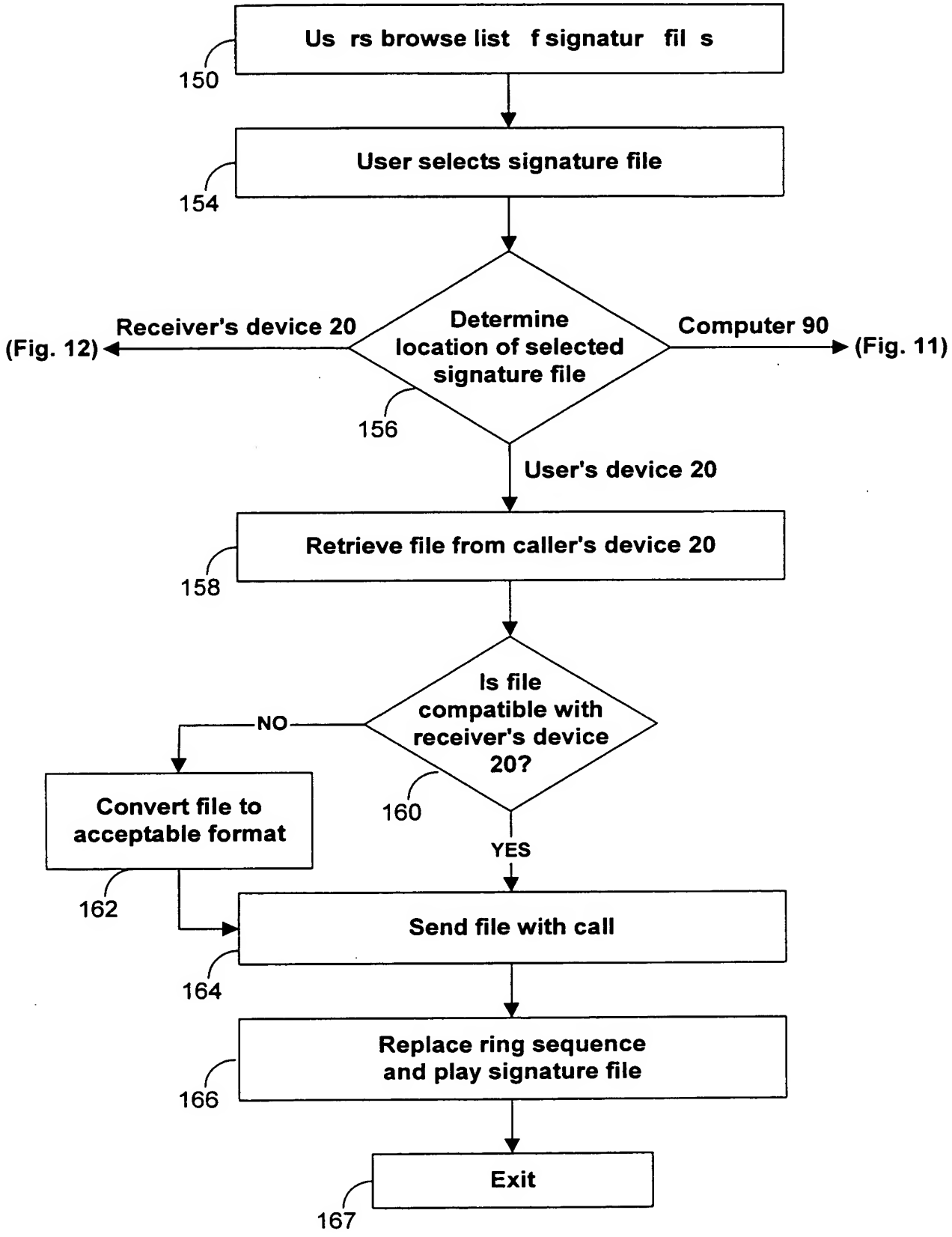
Users browse list of signature files
150
User selects signature file
154
Determine location of selected signature file
156
Receiver's device 20
(Fig. 12)
Computer 90
(Fig. 11)
User's device 20
Retrieve file from caller's device 20
158
Is file compatible with receiver's device 20?
160
NO
YES
Convert file to acceptable format
162
Send file with call
164
Replace ring sequence and play signature file
166
Exit
167

FIG. 10

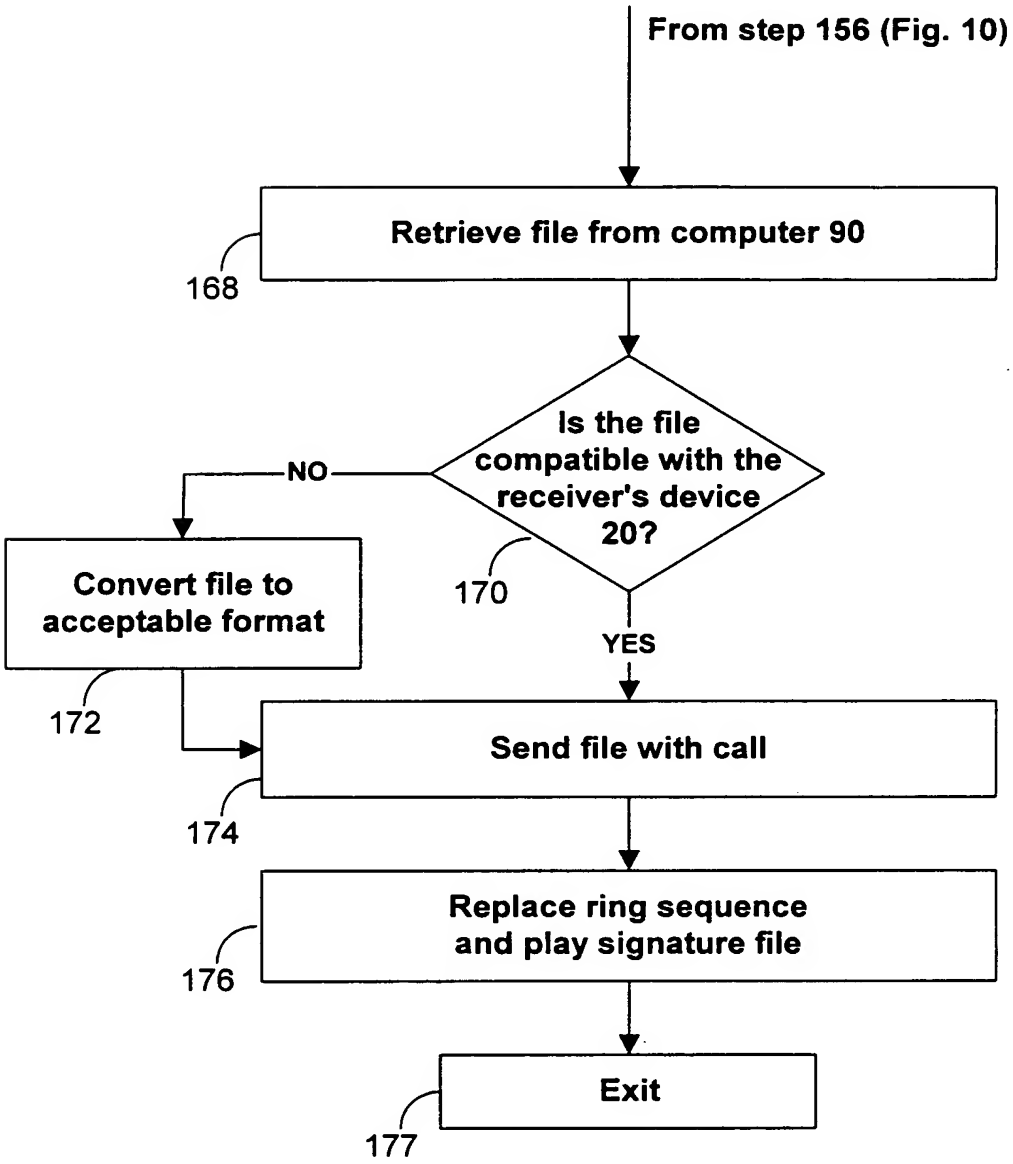
From step 156 (Fig. 10)
Retrieve file from computer 90
168
Is the file compatible with the receiver's device 20?
170
NO
YES
Convert file to acceptable format
172
Send file with call
174
Replace ring sequence and play signature file
176
Exit
177

FIG. 11

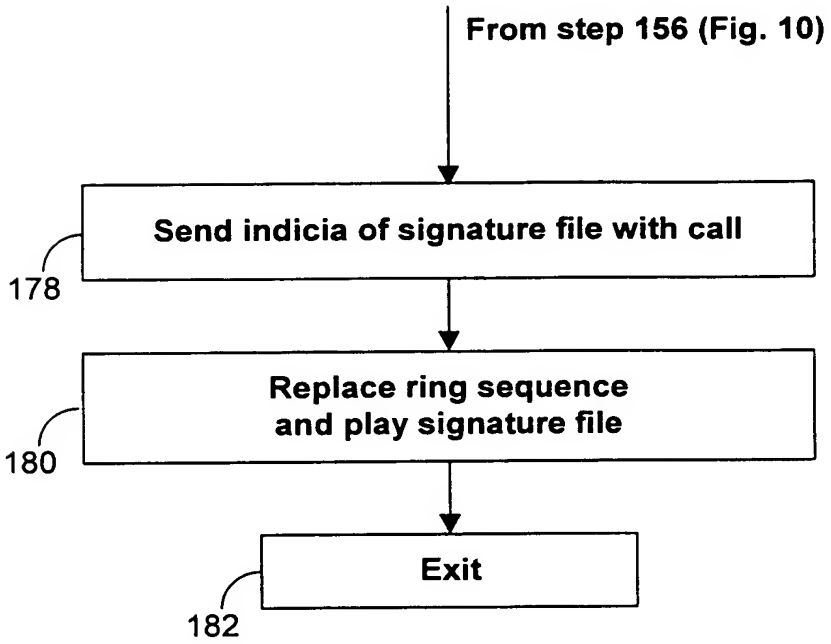
From step 156 (Fig. 10)
Send indicia of signature file with call
178
Replace ring sequence and play signature file
180
Exit
182

FIG. 12